

United States Government

Department of Energy

Bonneville Power Administration

memorandum

DATE: July 10, 2003

REPLY TO
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-166-Grandview-Red Mountain #1 Corridor Maintenance)

TO: William Erickson – TFP/Walla Walla
Natural Resource Specialist

Proposed Action: Vegetation Management for the Grandview-Red Mountain #1 Transmission Line Corridor from Benton City Substation to Tower 19/9. The line is a 115kV Single Circuit Transmission Line having an easement width of 100 feet. The proposed work will be accomplished in the indicated section of the transmission line corridor as referenced on the attached checklist.

Location: The subject right-of-way is located in Benton County, WA, being in the Walla Walla Region.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: The work will include the removal of danger trees, removal or trimming of individual yard trees and brush clearing. This vegetation poses a hazard to the operation of the subject transmission line.

Analysis: Please see the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

BPA proposes to remove woody brush and danger trees and remove or trim individual yard trees from the transmission line right-of-way in accordance with the National Electrical Safety Code and BPA Standards. The brush is hampering access to the transmission towers and the tree heights are approaching the electrical clearance zones of the lines. BPA is clearing the brush to provide better access and clearing the trees to prevent them from falling or growing into the lines causing system outages. The work will provide system reliability.

The work sites are located either in riparian areas or rural residential areas.

Initial entry

The trees approaching the clearance zones have been identified and marked either with red paint or ribbon

The riparian area is located from 19/4 to 19/4 + 440. Sites in the riparian areas will be treated to control tall trees using cut stump and selective basal herbicide applications. Trees over 10 feet tall will be controlled from 19/4 to 19/4 + 250. Trees over 20 feet tall will be controlled from 19/4 + 250 to 19/4 + 440.

In the rural residential areas of the work, individual yard trees will be removed or trimmed, as needed using a combination of all approved methods of vegetation control. Manual clearing of woody brush will also occur.

Subsequent entry

During subsequent entries, selective herbicide treatments using spot, cut stump, and localized applications will be used. Herbicides labeled for wetlands will be used in riparian areas.

Future cycles

Work during future cycles will be similar to that used during subsequent entries.

2. Identify surrounding land use and landowners/managers and any mitigation.

The work site is located in either riparian or rural residential areas. The non-riparian land is also used for agricultural and grazing purposes. The types and density of trees to be removed are noted on the checklist. All affected land is privately owned and developed. No other agencies or Tribal involvement exists.

Landowners will be contacted if trees pose a hazard to the line. This contact will be by letter, personal contact or e-mail. BPA will remove the trees at no expense to the landowner.

To promote good will with the landowners low growing trees will be offered as a replacement for mitigation purposes.

3. Identify natural resources and any mitigation.

An unnamed stream and wetlands are present in the riparian areas located from Tower 19/4 to 19/4 + 440. Measures as outlined in the attached checklist will be followed to limit impacts to that area. Irrigation ditches and an isolated spring (at 19/4 + 425) are also located along the right-of-way. As referenced in the checklist, applicable buffers will be used in those areas.

The Yakima River is located approximately ½ mile east of Tower 19/9. A search on T-View shows that the Yakima River has listed anadromous fish. No planned work activities will impact the river or the listed anadromous fish.

No ground disturbance will occur, so no cultural resources, if present, will be affected.

Based on this, the work will not impact any natural or cultural resources, so no mitigation will be necessary.

4. Determine vegetation control and debris disposal methods.

Vegetation control in the riparian areas will as approved in the Vegetation Management EIS and as indicated in the checklist. Vegetation control on private lands will be by all approved manual, limited mechanical, biological and herbicidal treatments.

Debris generated in the riparian areas will be lopped and scattered. No debris will be left in water. Debris disposal on private lands will be by a combination of chipping, lopping and scattering, mulching and stump grinding if necessary.

5. Determine revegetation methods, if necessary.

As referenced above, to promote good will with the landowners, low growing trees will be offered as a replacement for mitigation purposes.

6. Determine monitoring needs.

The site will be inspected during the initial treatment. The right-of-way will also be inspected and reviewed 2-3 times per year to determine if any additional encroaching trees need to be addressed.

7. Prepare appropriate environmental documentation.

Besides this Supplement Analysis, no other environmental documentation should be necessary.

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Ken Hutchinson

Ken Hutchinson
Environmental Scientist

CONCUR: /s/ Thomas C. McKinney
Thomas C. McKinney
NEPA Compliance Officer

DATE: 07/14/2003

Attachment

cc:

L. Croff – KEC-4
T. McKinney – KEC-4
C. Leiter – KEP-4
J. Meyer – KEP-4
K. Hutchinson – KEPR/Walla Walla
P. Key – LC-7
J. Hilliard Creecy – T-DITT2
D. Hollen – TF/DOB-1
R. Duncan – TFP/Walla Walla
M. Richardson – TFP/Walla Walla
G. Wilfong – TFPF/Pasco
Environmental File – KEC
Official File – KEP (EQ-14)

Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

See Handbook — [List of Right-of-way Components](#) for checkboxes and the requirements for the components [Rights-of-way](#), [Access Roads](#), [Switch Platforms](#), [Danger Trees](#), and [Microwave Beam paths](#).

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Grandview-Red Mountain #1	30 mi 115 kV	100 ft	Benton City SUB to 19/9< 0.5 miles

Right Of Way: Woody Brush Clearing

Danger Tree clearing

Other - Individual Yard trees on and off of the right of way

1.2 Describe the vegetation needing management.

See handbook — [List of Vegetation Types](#), [Density](#), [Noxious Weeds](#) for checkboxes and requirements.

Vegetation Types:

Alder

Maple

Oak

Willows

Russian Olive

Ash

Residential/orchard tree trimming

Other/Description - Ornamental trees

Density: From one to moderate density

Other/Description – Riparian Trees

Birch

Cottonwood

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — for requirements and checkboxes.

Sites are in a riparian area and rural residential area. LGPC is not an appropriate strategy

1.4 Describe overall management scheme/schedule.

See Handbook - [Overall Management Scheme/Schedule](#).

Initial entry – After cutting, sites in the riparian area will be treated to control tall trees using cut stump treatments. Selective basal herbicide application will also be used. Tree over 10 feet tall will be controlled from 19/4 to 19/4+250 feet. Trees over 20 feet tall will be controlled from 19/4+250 to 19/4+440.

Yard trees will be removed as needed.

Subsequent entry's – selective herbicide treatment using spot treatments, cut stump, and localized. Herbicides labeled for wetlands (2,4-d, triclopyr, glyphosate, imazapyr, and Escort) will be used.

Future cycles - Same as subsequent treatment

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — [Landowners/Managers/Uses](#) for requirements, and [List of Landowners/Managers/Uses](#) for a checkbox list.

Landowners/Managers/Uses:

Residential

Rural

Agricultural

Grazing lands

2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., doorhanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — [Methods for Notification and Requesting Information](#) for requirements.

Trees are identified and marked with red paint or ribbon. Notice is given to the landowner either verbally and or writing prior to entry

2.3 List the specific land owner/landuse measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — [Requirements and Guidance for Various Landowners/Uses](#) for requirements and guidance, also [Residential/Commercial](#), [Agricultural](#), [Tribal Reservations](#), [FS-managed lands](#), [BLM –managed lands](#), [Other federal lands](#), [State/ Local Lands](#).

Landowners will be contacted if trees pose a hazard to the line. This contact will be by letter, personal contact, or e-mail. BPA will remove the tree at no expense to the landowner. Items such as cleanup, wood removal and stump removal is negotiable.

No agreements on record

In most cases, to promote good will, removed trees will be replaced with a low-growing species, or treated with tree growth regulators.

Span		Landowner	Replace/regulator?
To	From		
19/9	19/4	Varies	Both as applicable

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — [Landowner Agreements](#) for requirements.

None

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

See handbook — [Casual Informal Use of Right-of-way](#) for requirements.

Sites are backyards or open agricultural area. Casual use is expected.

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — [Other Potentially Affected Publics](#) for requirements and suggestions.

No agencies or Tribe involvement - all affected land is privately owned and developed

3. IDENTIFY NATURAL RESOURCES

See Handbook — [Natural Resources](#)

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — [Water Resources](#) for requirements for working near water resources including buffer zones.

Streams and Wetlands

An unnamed stream is located from span 19/4 + 400 to 19/4. Also, isolated streams and wetlands are also present along the work corridor. There are no T&E issues associated with any of these water resources. The herbicides, advisories, toxicity and treatment methodologies to be used in these areas are shown in the table below.

HERBICIDE	Ground water Advisory	Highest Aquatic Toxicity Invertebrates/Vertebrates	Spot treat	Localized
Transline Clopyralid	X	Practically Non Toxic	25 ft	35 ft
2,4-d Dimethyl amine Salt	X	Practically Non Toxic	25 ft	35 ft
Glypro/Accord Glyphosate		Practically Non Toxic	Up to edge	Up to edge
2,4-d Dodecyl/amine salt	X	Slightly toxic	25 ft	35 ft
Escort		Practically Non Toxic	Up to edge	Up to edge
Garlon 3A		Practically Non Toxic	Up to edge	Up to edge
Garlon 4*		Highly Toxic	35 ft	100 ft
Imazapyr		Practically Non Toxic	Up to edge	Up to edge

Private Lands

Private lands, within 30.5 m (100 ft.) of a stream and wetland areas. Available: all manual and biological treatments

Manual: Hand tools and chainsaws

Mechanical: None, within 50 feet of streams or wetlands. Only on Access Roads and Tower sites

Herbicide: Formulations of non- toxic or slightly toxic (to aquatic species) formulations of glyphosate (such as Rodeo®), Imazapyr, 2,4-d, and triclopyr (Garlon 3A and Garlon 4) may be prescribed for wick, cut-stump, basal-stem, stem-injection, spot-foliar (localized), and ground broadcast treatments using appropriate buffers. In addition, Escort and clopyralid can be used for spot foliar and broadcast treatments. Broadcast treatments using handgun or ground broadcast can be completed with the appropriate buffers on noxious weeds, access roads and tower sites.

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — [Herbicide Use Near Irrigation, Wells or Springs](#) for buffers and herbicide restrictions.

Span	Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
To				
Varies	Irrigation, and Drainage ditches in area	None	50 feet	
19/4+425	Spring located south edge of ROW	None	50 feet	Not considered domestic water source

Table III-2: Herbicide-free Zones for Rights-of-way, Electric Yards, and Non-electric Facilities

Zone	Buffer Width
Agricultural Irrigation Source of Any Kind (Wet or Dry)	15m (50 ft.) from each bank (linear) or well (radius) for any herbicide.
Domestic/Public Drinking Water Well	50m (164 ft.) radius for any herbicide having a ground/surface water advisory* 15m (50 ft.) radius for any other herbicide
Domestic/Public Drinking Water Intakes/Spring Developments	For slopes <10% 50-m (164- ft.) radius for any herbicide having a ground/surface water advisory* 15-m (50-ft.) radius for any other herbicide For Slopes >10% <30% 150-m (492-ft.) radius for any herbicide having a ground/surface water advisory* 50-m (164-ft.) radius for any other herbicide

	<p>For slopes >30%</p> <p>300-m (984-ft.) radius for any herbicide having a ground/surface water advisory*</p> <p>100-m (328-ft.) radius for any other herbicide</p>
Sole Source Aquifers	As per local aquifer management plan.

*as stated on the label

The buffers in this table are to be used unless other agencies, local authorities, or T&E consultations require more strict buffers. In cases of more strict local buffers, those would apply.

See table 7a for general aquatic toxicities of and label advisories of the active ingredients.

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — [T&E Plant or Animal Species](#) for requirements and determining presence.

The Yakima River is located within .5 miles east of tower 19/9. A search on T-View shows that the Yakima River has listed anadromous fish. No planned work activities will impact the river or the listed anadromous fish.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

See Handbook — [Protecting Other Species](#) for requirements.

None planned

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — [Visual Sensitive Areas](#) for requirements.

None

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – [Cultural Resources](#) for requirements.

No ground disturbance is planned, therefore any cultural resources, if present, will not be disturbed.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

See Handbook – [Steep/Unstable Slopes](#) for requirements.

None

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – [Spanned Canyons](#) for requirements.

None

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — [Methods](#)

4.1 List Methods that will be used in areas not previously addressed in steps above.

See Handbook — [Manual, Mechanical, Biological, and Herbicides](#) for requirements for each of the methods.

Riparian areas – Cut stump treatment after cutting or basal treatments using herbicides stated in Section 3.1

Private lands with no other environmental constraints. Available: all manual, limited mechanical, biological, and herbicidal treatments.

Herbicides: Glyphosate, Picloram, Imazapyr, 2,4-d, Triclopyr (Garlon 3A and Garlon 4), Dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments, as well as for spot-foliar, cut stubble, and broadcast-foliar treatments. In addition, Escort and clopyralid can be used for spot foliar and broadcast treatments.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — [Debris disposal](#) for a checkbox list and requirements.

Site specific prescription will include options on debris disposal see cut sheet.

Debris Disposal:

- ☐ **Chip** (Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site. Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.) This method to be used on non-riparian areas.
- ☐ **Lop and Scatter** (Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.) This method used both in riparian and non-riparian areas. No disposal of material in water will be allowed in riparian areas.
- ☐ **Mulch** (Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.) This method to be used in non-riparian areas.

Other – Stump grinding if merited in non-riparian areas.

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — [Reseeding/replanting](#) for requirements.

Span		Reason for Reseed/plant	Type of Seed or Plants	Native?
To	From			
19/9	19/4	To promote goodwill with landowner (planting trees)	Low growing	No

5.3 If not using native seed/plants, describe why.

Non-native species have had a better survival success rate.

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

No follow-up is anticipated

6.0 DETERMINE MONITORING NEEDS

See handbook — [Monitoring](#) for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Right of way is reviewed 2-3 times per year to follow up with any additional high trees

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

Right of way is reviewed 2-3 times per year to follow up with any additional high trees

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — [Prepare Appropriate Environmental Documentation](#) for requirements.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.

None

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

No